

If "ignorance is bliss," we are in a blissful state, indeed, for, with respect to the practice of surveying and measuring artificers' work, we know nothing of it. What we know of the theory has been gleaned from books; although both our masters (for we should have mentioned that we have to serve two) hold public appointments as surveyors.

Now, Sir, is this teaching us the profession on which we shall depend for our subsistence? When our period of slavery expires, what are we to do? Shall we be able to earn even bread and cheese? or shall we not be compelled to follow a method which, from its constant adoption, shows the extent to which this abominable system is carried, and advertise to the effect that we shall be glad to offer our services in return for the advantages to be received?—T. and C.

Amongst other letters on the subject, we have a semi-serious epistle in reply to the "Lament" from "one plagued with two pupils, who, if not A B and C D themselves, are as unreasonable."

There are many persons (he writes), who, not caring what the Dickens Pecksniff is thought of by the profession, are only anxious to get their children the privilege of saying that they have been in an office of respectability (you see, Sir, I say nothing of reputation), there is no inquiry on the part of the parents as to whether the future master is competent to teach at all, and if so, what he is most able to teach,—the only inquiry is what is the lowest amount of fee? and the shortest term?

Now, Sir, you know as well as I do, that even a small sum is not to be thrown away in these times, and that for this professional men do endure the presence of these called pupils; and may even endeavour to keep them from committing actual mischief, as fencing with tee-squares, and standing on each other's heads, by giving them that sort of employment in which they are least likely to make irretrievable errors. The first men of the day, both architects and engineers, cannot possibly have leisure to teach, though receiving from 500 to 1,000 guineas with their pupils, and indeed I find that now these great people say, "Your son may come into my office, and also may ask me any questions he likes, but I can undertake nothing more." Sensible readers may determine who is the greatest sufferer, the master or the pupil.

A. B. and C. D., supposing them to be my plagues, complain that I do not belong to the classic style; well, their parents, for themselves, know that for the last ten years I have had no occasion or opportunity to work in any but the Gothic styles. As to explaining differences, do they read for themselves? They allow that they have drawn the Orders, Ionic volutes, &c., and in that &c. is comprised all that has ever been taught in some of the most classic London offices since the year 1800. They say that they have now and then a specification or bill of quantities to write out; well, Sir, in my time of apprenticeship such things were very rarely allowed to go into the office, and even now, I believe, the rule is pretty strictly observed, especially by the engineers. As you will observe, they do not pretend that they have ever sought for information from me, or from any course of private study out of the office. Why, Sir, fourteen hours a-day sometimes, twelve I may say always, did I work for my elementary education. Let them try the same course; and being able to show that they are doing their part, their parents or guardians may justly call on their master to do his.—Y. Z.

**EXHIBITION OF WORKS OF MEDIEVAL ART.**—The exhibition of works of mediæval art, now open to the public, at the Society of Arts, in the Adelphi, should not be hastily glanced at, but examined thoroughly, when it will be found not "a mere goldsmith's shop," as we heard a respectable country gentleman term it, but a collection of gems of art, presenting to the modern executant an evidence of how much he has yet to do,—to the amateur the means of correcting his judgment,—and to the archaeologist materials for study. Such an assemblage of rare things of the kind has never before been seen. A very full catalogue has been prepared, but the mode of numbering the objects gives much trouble to the visitor.

#### MEETING AT KENSINGTON FOR THE EXHIBITION OF 1851.

On Wednesday evening a meeting was held at the King's Arms, Kensington, to promote the objects of the forthcoming exhibition. The meeting was convened by Archdeacon Sinclair (the Vicar of Kensington), in consequence of a requisition most numerously signed; and

The Right Hon. W. S. Macdaniel, M.P., took the chair on the introduction of the vicar, and opened the proceedings in a few observations indicating the advantages to be expected from the exhibition.

Resolutions were proposed, and carried with enthusiasm, expressive of the feeling that the arts and sciences, agriculture, manufactures, and trade, would be greatly promoted by the plan proposed; and that its extension to the products of all nations would tend to maintain the blessings of peace. A local committee, consisting of Lord Holland, the Chairman, the Vicar, the Hon. Mr. Curzon, Messrs. Cope, Creswick, Horsley, Mulready, Redgrave, Webster, and Wyon, of the Royal Academy, Mr. Thackeray, Mr. Planché, and other residents in the locality, was appointed.

The meeting, which was remarkable for its unanimous appreciation of the benefits to be derived from the exhibition, especially in promoting art-education amongst operatives, was addressed by the following gentlemen, who moved and seconded the various resolutions:—Lord Robert Grosvenor, M.P., Mr. Hawke, Mr. Milner Gibson, M.P., Mr. G. Godwin, Mr. H. W. Vincent, Mr. J. Macgregor, M.P., Dr. Waddilove, Captain Hood, Mr. Redgrave, R.A., the Hon. Mr. Curzon, &c. Mr. Barber, of the London Committee, referred to the successful progress of the subscription there; and the meeting was also addressed by some representatives of the working classes of the parish, who expressed great interest in the matter.

#### THE PLANS FOR THE DRAINAGE OF LONDON.

On the 15th inst. the report of a sub-committee, consisting of Sir John Burgoyne, Captains Harries and Vetch, and Messrs. Stephenson and Rendell, appointed to examine the plans sent in for the drainage of the metropolis, was considered at a special meeting of the Sewers Commission. The report set forth that the want of necessary information for competitors was evident in the schemes, and that the committee had made every allowance for this disadvantage. They distributed the plans under the following divisions:—

"1. That which may be designated as the portable cesspool system, by which it is proposed that each dwelling-house should be furnished with a portable iron or other vessel, or receptacle, for fecal matter, which is to be periodically removed to depôts situated in the suburbs of the metropolis, whence it is to be distributed in the form of manure for the purposes of agriculture. It is an essential condition of this class of schemes, that as little water as possible should be allowed to mingle with the solid sewage matter, in order that its fertilizing power should not be diminished, and that its augmented bulk should not oppose obstacles to its convenient removal and transport.

2. The schemes included under this division contemplate the discharge of the whole drainage of London into the Thames, and the maintenance of the present system of outlets, though under improved conditions. The projectors contend that the river is the natural and only legitimate outlet for the sewage of the metropolis, and place reliance upon the effect of an increased supply of water, so abundant as to ensure an almost intermittent current in the sewers, by which it is assumed that the sewage matter will be extensively diluted, and its effect upon the vast body of tidal water rendered scarcely perceptible. It is also a distinguishing feature of the schemes that the outfalls of the sewers are intended to be carried out to or beyond low water mark, and generally into the river.

3. The authors of the projects included in the third division propose to lay down tunnels or culverts of iron, bricks, or other material, in and along the mud banks of the Thames, and occasionally in or under its bed, for the purpose of intercepting and receiving, at the various outlets of the existing sewers, the drainage of the districts on each side of the river. These culverts or tunnels are generally continued to the marsh grounds, in the county of Essex, beyond the River Lea, on the north side of the Thames, and to Plumstead marshes on the south, at which points reservoirs and filtering-beds

are to be found for preparing and rendering portable the sewage matter for manure.

4. The fourth division differs from the preceding one in this particular, that, instead of having a single intercepted sewer at the lowest level, it proposes several of such sewers at progressive ranges of altitude, determined by the various drainage areas, with the view of preventing the reflux of the higher portions from descending to and clogging the flat districts below. In the great majority of these projects these lines of intercepting sewers are conducted to points in the marshes, in the east of London, at a lower level than low water, in consequence of which it becomes necessary to employ steam-power to pump up the refuse.

5. The fifth division involves the establishment of cesspools at the outlets of the principal sewers along the banks of the Thames, it being the intention of the framers of this class of plans to unite several of these outlets into one, according to the conditions and requirements of particular localities, and at these points of union or concentration to erect pumping apparatus of great power for conveying the sewage matter into the rural districts, either through iron pipes, or by means of carts, barges, or other modes of transport.

6. This class has for its object the division of the metropolis into separate drainage areas. In the centre of which it is proposed to form sumps or pits for the reception of the sewage matter, from which it is intended to be pumped and distributed by various methods, for the most part similar in character to those adopted in the case of the schemes described under the last division.

7. This division includes a numerous class of projects, which, with scarcely an exception, instead of being directed to the object of making provision for an improved system of general sewerage, are almost exclusively confined to the consideration of processes and expedients for inflating, deodorising, and solidifying the sewage matter for the purposes of the farmer and market gardener.

In addition to schemes involving definite characteristics and susceptible of some species of classification, numerous communications have come under our notice, which may for the most part be described as vague, speculative, disquisitions, or collateral and subordinate branches of the general subject of drainage, few of which can be said to possess any practical value. It is observable that the great majority of these schemes adopt as an essential principle the diversion from the Thames of the great mass of London sewage matter now discharged into it, an object which it appears to us most desirable to accomplish to the greatest practicable extent. We also assent to the views of those who are opposed to the separation of surface and house-drainage. We think it objectionable generally to bring down the drainage of the high grounds to the lower districts, and we agree in the opinion that it is of permanent importance to make every effort for accomplishing the drainage of London by natural means, that machinery should not be employed generally or on a large scale, and that it should only be resorted to in the last instance, and under special circumstances, as in the case of detached and insulated districts, limited in extent, and so situated as to render it a matter of undue difficulty to unite them with others."

They proceed to say that,—

"The best conceived and most practical scheme submitted to the commissioners is, in our opinion, that of Mr. J. B. McLean; and, though we do not deem ourselves justified in recommending any one of these schemes for adoption, as a whole, we yet think that Mr. McLean's plan contains many of the main elements of a sound and judicious system of drainage. It is characterised by a well-devised system of intercepting sewers, in determining the situation and course of which a careful and elaborate study of the levels has evidently been made. These intercepting sewers generally follow the direction of the main thoroughfares, and avoid any extensive interference with private property.

The chief of them on the north side of the Thames commences near Battle-bridge, and, after running a course of nearly eight miles, terminates at the river Thames, at some distance below the river Lea.

There is, however, one portion of the metropolis, namely, the long, narrow tract lying on the north margin of the Thames, between Charing-cross and Shadwell, for which sufficient provision does not seem to be made. It is not made apparent whether it is proposed to resort to pumping for the drainage of this part of London; but, with regard to a large proportion of the tract in question, no other expedient would seem to be applicable. The lower districts of Westminster are treated in a somewhat peculiar manner, namely, by carrying an iron siphon across and underneath the Thames, above Vauxhall-bridge.

This portion of the scheme involves great difficulties, and we consider it decidedly objectionable; but it must be borne in mind that it proposes to deal with the drainage of Westminster (confessedly a difficult subject) without the aid of a pumping